MILITARY SPECIFICATION SHEET

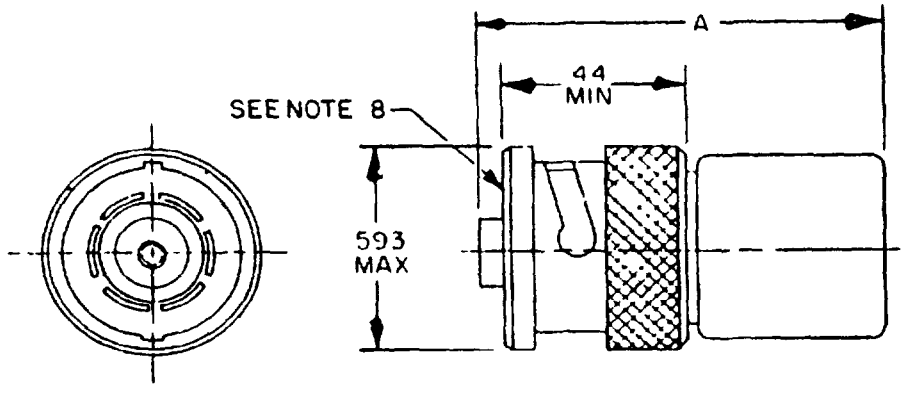
CONNECTORS, PLUG, ELECTRICAL, COAXIAL, RADIO FREQUENCY, HIGH VOLTAGE

(SERIES MHV (CABLED), PIN CONTACT, CLASS 2)

INACTIVE FOR NEW DESIGN AS OF
1 NOVEMBER 1979

This specification is approved for use by all Departments and Agencies of the Department of Defense.

The requirements for acquiring the connectors described herein shall consist of this specification sheet and the latest issue of MIL-C-39012.



Inches	mm
.44	11.2
.593	15.06

NOTES:
1. Dimensions are in inches.
2. Metric equivalents are given for general information only.
3. For dimension A, see table I.
4. Dimension .593 is the largest overall diameter of the connector.
5. Wrench flats are to accommodate standard wrench openings in accordance with H-28, appendix IO.
6. All undimensioned pictorial representations are for reference purposes only.
7. Dimension A defines the maximum length of the connector when assembled to the appropriate cable.
8. Series MHV, pin contact, in accordance with MIL-STD-348, 303 1.

FIGURE 1. General configuration.

AMSC N/A
FSC 5935

TABLE I. Dash number, cross-reference and dimensions.

Dash number	Applicable cable number	Dim	Inches-millimeters maximum
CATEGORY A - FIELD SERVICEABLE (NO SPECIAL TOOLS REQUIRED)			
0001	M17/29-RG59 M17/30-RG62 M17/90-RG71 M17/97-RG210	A	1.5156(37.13)

ENGINEERING DATA:

Nominal impedance: Nonconstant.

Frequency range: Not applicable.

Voltage rating:

1,600 volts rms, maximum working voltage at sea level.

375 volts rms, maximum at 70,000 feet.

Temperature rating: -65°C to +165°C.

REQUIREMENTS:

Dimensions and configuration: See figure 1 and MIL-STD-348.

Force to engage and disengage:

Longitudinal force: 3 pounds, maximum.

Torque: 2-1/2 inch-pounds, maximum.

Coupling mechanism retention force: 100 pounds, minimum.

Mating characteristics: See figure 2 and MIL-STD-348 for dimensions.

Center contact retention: Not applicable.

Hermetic seal: Not applicable.

Leakage (pressurized connectors): Not applicable.

Insulation resistance Method 302 of MIL-STD-202, test condition B. 5,000 megohms minimum.

Contact resistance· In milliohms maximum:

	Initial	After environment
Center contact	2.0	2.5
Outer contact	.2	Not applicable
Braid to body	.1	Not applicable

Corrosion (salt spray): Method 101, test conditon B, MIL-STD-202.

Dielectric withstanding voltage· Method 301 of MIL-STD-202. 5,000 volts rms minimum at sea level.

Corona level:

Voltage - 1,245 volts rms.

Altitude - 70,000 feet.

RF high potential withstanding voltage: Not applicable.

Connector durability:

Insertion and withdrawal force: 500 cycles, minimum at 12 cycles/min maximum. The mating force shall meet the mating characteristics and force to engage and disengage requirements.

Initial: 5 pounds, maximum.

Final: 5 pounds maximum, 1 pound minimum.

Vibration, high frequency: Method 204 of MIL-STD-202, test condition B. No discontinuities.

Shock (specified pulse): Method 213 of MIL-STD-202, test condition I. Acceleration: 50 g's at 7 milliseconds. No discontinuities.

Thermal shock : Method 107 of MIL-STD-202, test condition B, except test high temperature shall be +85°C. High temperature shall be +200°C for connectors using +200°C cable (see table I).

Moisture resistance: Method 106 of MIL-STD-202. No measurements at high humidity. Insulation resistance shall be at least 200 megohms within 5 minutes after removal from humidity.

Cable retention force:

Noncrimp assemblies: 40 pound, minimum.

Qualification: Not applicable.

Part number: M39012/100-0001.

TABLE II. Supersession and cross-reference.

Part number	Superseded numbers			
	CAGE 74868	CAGE 91836	CAGE 77820	Type designation
M39012/100-0001	27975	KC-59-02	3621-1	UG932A

Revision letters are not used to denote changes due to the extensiveness of the changes.

Custodians:
Army - CR
Navy - EC
Air Force - 85

Review activities:
Army - MI
Air Force - 11, 17, 99
DLA - ES

User activities:
Army - AM, AT, ME
Navy - AS, MC, OS, SH
Air Force - 19

Preparing activity:
Army - CR

Agent:
DLA - ES

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